
SAFETY DATA SHEET - SDS

Product : ALKEST TW 60 K

Review : 02

May 29th, 2013

1. IDENTIFICATION OF SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product ALKEST TW 60 K

Internal identification code --

Relevant recommended uses Industrial uses.

Company Oxiteno México, S.A de C.V

Address Insurgentes Sur 1685, Piso 11
Col. Gpe. Inn. C. P. 01020
México, D.F.

Phone number (55) 5322-0560

Fax (55) 5661-6242

Emergency Phone number Coatzacoalcos: 52 (921) 2110903
Guadalajara: 52 (33) 3697 0202
San Juan del Rio: 52 (427) 101 1034
SETIQ: 01800 00 214 00 / 52 (55) 5559 1588 (D.F.)
For Chemical Emergency - Spill, Leak, Fire, Exposure or Accident:
Call CHEMTREC Day or Night 800-424-9300 (Domestic North America)
International, Call +1 703-527-3887 (collect calls accepted)

2. HAZARDS IDENTIFICATION

Classification No classification is assigned according to NBR 14725-2.

Label Elements

- **Hazard Pictograms** Not applicable.
- **Signal Word** Not applicable.
- **Hazard Statements** Not applicable.
- **Precautionary Statements** Not applicable.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Brand or Generic Chemical Name ND

Product Type Substance.

Synonyms Polyoxyethylene sorbitan (20) monostearate; Ethoxylated anhydrosorbitol monostearate.

CAS Number 9005-67-8 (generic).

EINECS/NLP number 500-020-4 (generic).

Impurities which contribute to the classification of the substance There are no impurities which contribute to the classification of the substance.

4. FIRST-AID MEASURES

Procedure in Case of:

- **Ingestion** Seek prompt medical attention.
Do not induce vomiting.
Vomiting should only be induced by medical personnel.
If vomiting occurs, keep the head lower than chest to avoid aspiration into the lungs.
Never give anything by mouth to an unconscious or convulsing person.
- **Inhalation** Seek prompt medical attention.
Remove victim to fresh air.
If breathing is difficult, give oxygen.
If not breathing, give artificial respiration.
- **Skin contact** Remove contaminated clothing and shoes. Wash affected areas with plenty of running water, preferably under a shower.
Seek prompt medical attention.
- **Eye contact** Immediately flush with plenty of running water for at least 15 minutes, keeping eyelids open.
Remove contact lenses if easy to do.
Seek prompt medical attention.

SAFETY DATA SHEET - SDS

Product : ALKEST TW 60 K

Review : 02

May 29th, 2013

Most important symptoms/effects, acute and delayed

Ingestion- Very low toxicity; no acute toxic effects are known.

Inhalation- It is less probable that it causes inhalation problems at room temperature.

Skin- Normally it is not expected that exposure to small amounts, for short periods, can cause any toxic effect.

Eyes- It is not expected to cause significant irritation.

Information for doctor

There is not known any specific antidote. Direct the treatment in accordance with the symptoms and clinical conditions of the patient.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Use alcohol resistant foam, nebulized water, carbon dioxide or dry chemical powder.

Specific HazardsIn case of combustion, it may generate toxic fumes containing carbon monoxide, besides CO₂. Product is not flammable.**Protective measures for fire-fighters**

Water jets should not be used directly on igniting products because it may disperse the material and intensify the fire.

Self-contained breathing apparatus and protective clothing are required.

Cool the intact fire-exposed containers with water spray and remove them.

NFPA Rating

- Health 1
- Flammability 1
- Instability 0
- Special

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Isolate and signalize area.

Keep heat and/or ignition sources away.

Use personal protection equipment as indicated in Section 8, in order to avoid contact with spilled product.

Environmental Precautions

Prevent product from entering into soil and waterways.

Notify the competent authorities if the product has run into drainage systems or watercourse or has contaminated the ground or vegetation.

Methods and materials for containment and cleaning up

Stop if possible.

Contain and dike spilled product with earth or sand.

Eliminate ignition or heat sources.

Transfer to proper container.

Collect remnants with an appropriate absorbent material.

Wash the contaminated surface with water, which should be collected for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Use in a well-ventilated area.

Avoid inhalation and contact with eyes, skin or clothing through proper protection.

If occurs accidental contact, exposed area should be washed immediately.

Emergency eyewashes and showers shall be located in accessible locations.

Wash hands and face thoroughly after handling.

Wash contaminated clothing before reuse.

Conditions for safe storage

Store in a covered and well-ventilated area, away from sunlight and sources of heat or open flames.

Ensure that the storage location has adequate moisture, pressure and temperature.

Keep containers tightly closed when not in use.

The product can be stored in tanks, in the liquid state, at temperatures between 40 and 60 °C.

Incompatibilities

Avoid contact with:

Strong oxidizing agents.

Packaging Material

Recommended: carbon steel coated with vinyl ester resin, stainless steel and polyester resin reinforced with glass fiber. Inadequate: zinc (galvanized steel) and zinc alloys.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Control parameters

- TLV-TWA (ACGIH) Not established.
- PEL-TWA (OSHA) Not established.
- TLV-STEL (ACGIH) Not established.

SAFETY DATA SHEET - SDS

Product : ALKEST TW 60 K

Review : 02

May 29th, 2013

- **LT(NR15)** Not established.
- **Odor Threshold** Not available.
- **IDLH** Not available.
- **Biological Exposure Indices (ACGIH)** Not available.

Engineering Control Measures In closed environments, this product should be handled keeping proper exhaust (general diluter or local exhauster).

Individual Protection Measures

- **Eye Protection** Side shields or wide vision safety goggles.
- **Skin Protection** PVC apron.
It is recommended to adopt safety boots/shoes.
- **Hand Protection** Gloves made of rubber or PVC.
- **Breathing equipment** In case of emergency or contact with high concentrations of the product, wear an air supplied mask or self contained breathing apparatus. It is recommended to wear face mask with filter for organic vapors in case of exposure to vapors/aerosols.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| Appearance | Pasty yellowish liquid with bitter taste. |
| Odour and Odour threshold | Not available. |
| pH | 6,0 - 7,0 (sol. 5%). |
| Melting point/Freezing point | Not available. |
| Initial Boiling Point and Boiling Range | Not available. |
| Flash point | > 149 °C (open cup). |
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Not available. |
| Upper/lower flammability or explosive limits | Not available. |
| Vapour pressure | Not available. |
| Vapour density (air = 1) | Not available. |
| Relative density (water=1) | 1100 kg/m ³ (25 °C). |
| Apparent density | Not available. |
| Solubility | Soluble in water (25 °C). |
| Partition Coefficient n-octanol/water | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | ~ 600 mPa.s (25 °C). |

10. STABILITY AND REACTIVITY

| | |
|---|--|
| Chemical stability | Stable under normal conditions of use and storage. |
| Reactivity | No hazardous reactivity is expected. |
| Possibility of Hazardous Reactions | Not polymerize. |
| Conditions to avoid | High temperatures, ignition sources and prolonged exposure to the air. |
| Incompatible materials | Avoid contact with: Strong oxidizing agents. |

SAFETY DATA SHEET - SDS

Product : ALKEST TW 60 K

Review : 02

May 29th, 2013

Hazardous decomposition products In case of combustion, it may generate toxic fumes containing carbon monoxide, besides CO₂.**Considerations on the use of the product** Not available.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

- **Oral** Very low toxicity. LD50, rat: > 60 mL/kg.
- **Inhalation** Not available.
- **Dermal** Not available.

Skin corrosion/irritation Not available.**Serious eye damage/eye irritation** Draize eye irritation score was an 8 out of a possible 110.**Respiratory or skin sensitization** Not available.**Germ cell mutagenicity** Not available.**Carcinogenicity** There are no known serious chronic effects and/or references on carcinogenic, mutagenic or teratogenic product activity.**Reproductive toxicity** Not available.**Specific target organ toxicity - Single exposure** Not available.**Specific target organ toxicity - Repeated exposure** Not available.**Aspiration hazard** Not available.

12. ECOLOGICAL INFORMATION

Ecotoxicity The aquatic toxicity is not known.**Persistence and Degradability** Expected to be biodegradable.**Bioaccumulative Potential** It is not expected to bioaccumulate in the environment.**Mobility in soil** The product is slightly volatile and water soluble.**Other Adverse Effects** Not available.

13. DISPOSAL CONSIDERATIONS

Recommended methods of disposal

- **Product** The preferred options for disposal include reuse, recycling, co-processing, finding a use for a by-product, incineration or other thermal destruction process at licensed facilities. All procedures must follow specific operation standards in order to reduce health, safety and environmental risks. Perform co-processing, incineration or other thermal destruction process at facilities capable of minimizing or reducing air pollution emissions. The disposal must comply with federal, state, and local laws and regulations in accordance with the environmental agencies.
- **Product Remains** Same method as indicated for product.
- **Packaging** Do not cut or pierce the packaging, nor do hot work near them. Do not remove labels until the product has been fully removed and the packaging cleaned. The preferred options for disposal include reuse, recycling or reclamation at licensed facilities. All procedures must follow specific operation standards in order to reduce health, safety and environmental risks. The disposal must comply with local legislation and in accordance with standards from local environmental agencies.

14. TRANSPORT INFORMATION

Land Transport ANTT Product not classified as hazardous in accordance with Resolution 420/2004 - Transport Ministry.

- **UN number** N/A
 - **Proper Shipping Name** Not classified.
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SAFETY DATA SHEET - SDS

Product : ALKEST TW 60 K

Review : 02

May 29th, 2013

- **Hazard Class** Not classified.
- **Hazard Number** Not classified.
- **Packaging Group** Not classified.

Maritime Transport IMDG

Product not classified as hazardous in accordance with IMDG Code - 2010 Edition - IMO (International Maritime Organization).

- **UN number** N/A
- **Proper Shipping Name** Not classified.
- **IMDG Class** Not classified.
- **Packaging Group** Not classified.
- **EmS** Not classified.

Air Transport ICAO-TI and IATA-DGR

Product not classified as hazardous in accordance with Dangerous Goods Regulations - 52nd Edition - IATA (International Air Transport Association).

- **UN number** N/A
- **Proper Shipping Name** Not classified.
- **ICAO/IATA Class** Not classified.
- **Label** Not classified.
- **Packaging Group** Not classified.

Land Transportation ADR/RID (cross-border)

Product not classified as hazardous in accordance with Dangerous Goods by Road - Applicable from 1st January 2011 - Unece (United Nations Economic Commission for Europe).

- **UN number** N/A
- **Proper Shipping Name** Not classified.
- **ADR/RID class** Not classified.
- **Packaging Group** Not classified.
- **Danger code (Kemler)** Not classified.
- **Restriction Code** Not classified.

15. REGULATORY INFORMATION

Applicable standards

 Resolution 420 / 2004 – Transport Ministry.
 IMDG Code - 2010 Edition - IMO (International Maritime Organization).
 Dangerous Goods Regulations - 52nd Edition - IATA (International Air Transport Association).
 Dangerous Goods by Road (ADR) – Available from January 1st, 2011 – Unece (United Nations Economic Commission for Europe).
 Brazilian Technical Standards Association (ABNT) – NBR 14725 - Part 1 to 4.

16. OTHER INFORMATION

Remarks

Not available.

Sources

 SAX's Dangerous Properties of Industrial Materials - 10th Edition, Ricard J. Lewis, SR John Wiley & Sons, Inc, 2000.
 2011 TLVs and BEIs – Based on the Documentation of the Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices – ACGIH.
 2011 Guide to Occupational Exposure Values – ACGIH.
 European Chemicals Bureau - <http://ecb.jrc.it>
 Food Research. Vol. 21, Pg. 348, 1956.

SAFETY DATA SHEET - SDS

Product : ALKEST TW 60 K

Review : 02

May 29th, 2013

Abbreviations and acronyms

ACGIH: American Conference of Governmental Industrial Hygienists (USA).
ADR: European agreement concerning the international carriage of dangerous goods by road.
CAS: Chemical Abstracts Service (American Chemical Society - EUA).
EC50: Average concentration for 50% of maximum response.
LC: Lethal Concentration - substance concentration in the environment that leads to death after a certain period of exposure.
LC50: Lethal concentration for 50% of the test animals.
BOD: Biochemical Oxygen Demand.
LD50: Lethal Dose for 50% of the test animals.
LDLo: Lethal Dose Low - minimal amount of a chemical lethal to animals in testing.
EINECS: European Inventory of Existing Commercial Chemical Substances.
GHS: Globally Harmonized System of Classification and Labelling of Chemicals.
IARC: International Agency for Research on Cancer.
IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods by Regulations by the IATA
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the ICAO.
IMDG: International Maritime Code for Dangerous Goods.
IDLH - Immediately Dangerous To Life or Health Concentrations.
Kow: Octanol/water partition coefficient.
LT (NR 15): Exposure limits of the standard number 15 - Unhealthy Operations and Activities from the Ministry of Labour and Employment of Brazil.
LOAEL: Lowest Adverse Effect Level
LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database
NLP: No Longer Polymers.
NIOSH: National Institute for Occupational Safety and Health.
NOAEL: No Observed Adverse Effect Level
NTP: National Toxicology Program.
OSHA: Occupational Safety and Health Administration (EUA).
PEL-TWA: Exposure Limit Allowed – time-weighted average.
RID: Regulations concerning the international transport of dangerous goods by rail.
TLV-STEL: Tolerance Limit - short period of time (15 minutes, maximum).
TLV-TWA: Tolerance Limit – time weighted average.
WGK: Wassergefährdungsklasse (Germany) - Water Hazard Class.

This Safety Data Sheet was authored according to our current knowledge and experience, however cannot imply guarantee of any nature. Considering the variety of factors that can affect their process or application, the information on this sheet does not exempt the processors from the responsibility of executing their own tests and experiments.

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